#### **REQUIRED NOTES ON SITE PLANS – 01/31/08**

## **SKETCH PLAN**

This sketch plan lacks much of the information necessary for a thorough engineering evaluation and has been reviewed only for general conformance to City of Bethlehem standards to the extent permitted by the limited detail provided. Additional comments will be provided when a more detailed plan is submitted for review.

(Per M. D. Dorner 5-1-07)

# **NPDES NOTE**

By submission of these plans the engineer on record certifies that these plans are in complete conformance with the City of Bethlehem Storm Water Management Ordinance. (Per S. W. DeSalva 9-19-06)

## **IMPERVIOUS SURFACE FEE**

If on-lot detention <u>no</u> fee is charged. Impervious surfaces – additions, decks, patios, garages, driveways, sheds, similar structures, roof, parking areas, driveways areas, new streets, new sidewalk. EXEMPT – existing gravel crushed stone, hard packed soil.

Note that the LVPC reviews <u>all</u> site plans that it is required to sign prior to being recorded in the courthouse of either Northampton or Lehigh County, <u>regardless of the size of the site or the net amount of impervious surfaces</u>. The LVPC is not required to review a Storm Water Management Plan for a site that does not result in an increase of 10,000 square feet of impervious surfaces. (Per S. W. DeSalva 09-19-06) Square feet of impervious surface x 0.1 = \$ cost.

Invoice for fee must be generated by Engineering if not in Community Plus (Per C. Motko 6-29-06)

## **INLET MARKER NOTE**

All public inlets should have inlet markers. The design of the inlet markers shall be approved by the City Engineer.

## **EROSION & SEDIMENTATION CONTROL PLAN**

A plan is required for earth disturbance activity of 5,000 square feet or more. City requires County Conservation (LCCD or NCCD) review of 1 acre (43,560 square feet) or more.

#### **STORM WATER NOTES**

The maintenance of storm water facilities shall be the owner's responsibility. The owner's deed, and the deed to any subsequent owner, shall note that the owner shall accept the maintenance responsibilities. The City of Bethlehem shall be permitted to inspect the storm water facilities on at least an annual schedule to ensure that any necessary corrective work is performed in a timely manner.

The drainage easement provides for the flow of storm water across lots, and may not be altered without the written permission of the City Engineer. No obstructions such as planting berms or fences may be installed in the drainage easements areas without sufficient provision for the passage of storm water, and any such proposed provision shall be approved in writing by the City Engineer.

#### **DETENTION POND NOTE (if detention is proposed)**

Unless a geological survey demonstrates the feasibility of encouraging infiltration in a detention pond, the detention pond shall, generally, be lined with a 6-inch thick clay liner with a permeability of 1x10<sup>-7</sup> cm/sec or less. This clay liner shall, in turn, be covered by a 6-inch layer of viable topsoil on which a healthy growth of grass shall be established (unless rip-rapped). This liner system shall extend form the bottom of the pond to the elevation of the emergency spillway. The liner permeability of 1x10<sup>-7</sup> cm/sec shall be verified by lab tests on three field samples or other equivalent procedure acceptable to the City Engineer. Additional tests may be required by the City Engineer should any of the three original tests yield unacceptable results. All the testing shall be arranged and paid by the developer; however, the testing lab shall be certified in this area of testing and acceptable to the City Engineer.

The City Engineer may require a full 12-inch thick clay liner with permeability of  $1 \times 10^{-7}$  cm/sec. or less, where circumstances such as water depth or nearby utilities necessitate a greater degree of assurance against the formation of sinkholes. Also, the City Engineer may approve a different liner system that is - in the opinion of the City Engineer - equal to or better than the above mentioned liners.

The Contractor shall clean all accumulated sediment and silt from the pond at the end of the construction, and return the pond to its original design condition.

#### **REVISIONS NOTE**

In order to maintain continuity between plan revisions, any changes to a previous plan submission shall be flagged with a triangle. Any changes not flagged may be considered not approved. Flagged changes shall be referenced to the appropriate revision date in the revision block.

## **AS-BUILT NOTE**

Accurate as-built plans shall be kept up to date during the construction process. At the completion of the project record drawings shall be developed from the as-built plans and submitted to the City Engineer's Office. All final drawings shall show North American Datum (NAD) 1983 State Plane Coordinates in feet (Pennsylvania South, FIPS Zone 3702) and the digital file shall be in State Plane Feet Coordinates as applicable. The hard copy of the record drawings shall be in the form of a Mylar copy. The engineer of record shall certify (i.e. P.E. stamped and signed) that the record drawings comply substantially with the approved plan and that they conform to industry standards. All digital files shall reside on PC compatible CD Rom containing the digital representation of the final plan as presented on the twenty-four (24) inch by thirty-six (36) inch sheets. The digital map shall be AutoCAD compatible. All layers included in the digital maps shall be the standardized layers prepared and utilized by the City of Bethlehem to ensure compatibility with the City's existing CADD standards and as described in Appendix A of the City's Subdivision and Land Development Ordinance.

## **ENGINEERING PERMITS NOTE**

Prior to any work within the Right-of-Way, permits must be obtained from City Engineering Office.

## **RETAINING WALL NOTE**

Detail of retaining wall is required. A note shall be added to the plan stating the design and details of the retaining walls, certified by an Engineer experienced in the design of retaining walls and licensed in the State of Pennsylvania, will be submitted to the City for review and approval.

## **TAPPING FEE**

In accordance with Ordinance No. 4342, at the time of a request for a building permit, a sanitary sewer tapping fee of \$2,527 per EDU will need to be paid. The total amount will be determined when a sanitary sewer facilities planning module application is submitted. Please include a cover letter describing the project in the planning module submittal.

<u>Invoice for fee must be generated by Engineering</u> (Per C. Motko 6-29-06)

## **MISCELLANEOUS INFORMATION**

# SANITARY SEWER LOCATION DESIGN STANDARD

North & South = 5' West of centerline East & West = 5' South of centerline (Per J.Mari 7-5-06)

## **ROAD CONSTRUCTION OR OVERLAY**

If super pave is specified it must meet Penn DOT specifications Pub.408 (Per L.Mika 10-5-05)

# **Developer Agreements**

Agreement Review – Public Improvements (& Private Improvements)
Project Engineer to review agreement, if applicable

Site Inspection – once a month

Cost Estimates – use sample format with % column
Have engineer revise cost estimate to add missing items

Checklist and Estimate

10% Engineering & Miscellaneous - hold 10% until end as a cushion

Maintenance Bond - 1 year is typical

Read agreement for verbiage. If something is wrong we must write letter to the developer, memo to the Law Bureau

## Site Plan Review

Site Plan Checklist - use

Assignments

Standard Plan Notes

Sidewalk – Always require – copy from Matt Dorner

ROW Improvements (street, sidewalk, curb, curb ramps, street overlay)

LVPC, E & S & NPDES - include all three

Planning Module & Tapping Fee

Impervious Coverage Fee – If detention is shown none is required. Must demonstrate ability to handle new flows.

Storm water Management

# CARRY UNADDRESSED COMMENTS OVER TO THE NEXT MEMO !!!!!!